

Amendment to the Claims:

The following listing of claims replaces all previous versions and listings of claims:

1. (Currently amended) A method for providing dynamic deployment of grid services over a computer network, comprising:
 - installing grid artifacts in a directory located on a target hosting environment in response to an invocation of an implementation of a deployment grid service by a client system, the target hosting environment remotely located from the client system over the computer network, said grid artifacts including:
 - a Web service deployment descriptor;
 - a service implementation; and
 - a WSDL describing said service implementation; and
 - providing addressability of said grid service to [[a]] the client system over the computer network by updating said Web service deployment descriptor with service data elements and typemappings associated with said client system;
 - wherein said artifacts are resident in a GAR file provided by a grid services deployment system.
2. (Original) The method of claim 1, wherein installing said service implementation includes:
 - extracting Java class files from said GAR file;
 - copying said Java class files into a first subdirectory on said target hosting environment directory;
 - extracting Java Jar files from said GAR file; and
 - copying said Java jar files into a second subdirectory.
3. (Original) The method of claim 1, wherein installing said WSDL includes:
 - extracting WSDL files from said GAR file; and
 - copying said WSDL files into a third subdirectory on said target hosting environment.

4. (Original) The method of claim 1, wherein installing said Web service deployment descriptor includes:

- extracting service Web Service Deployment Descriptors (WSDD) files;
- copying said service WSDD files into a temporary directory of said target hosting environment directory;
- extracting client Web Service Deployment Descriptors (WSDD) files; and
- copying said client WSDD files to a temporary directory at said target hosting environment.

5. (Currently amended) The method of claim 1, wherein said installing said grid artifacts in a directory further includes:

- automatically copying said GAR file into a deployedGARs subdirectory in said target hosting environment directory, wherein said copying said GAR file into a deployedGARs subdirectory is operable for undeploying a grid service operation.

6. (Original) The method of claim 1, wherein said updating said Web service deployment descriptor with service data elements and typemappings associated with said client system comprises:

- merging said service element and sub-elements into said active WSDD; and
- merging any service XML-to-Java typemappings needed for XML-to-Java serialization and deserialization based upon said types defined in a grid service's WSDL definition; and

- merging any client XML-to-Java typemappings into said active client WSDD in the event that said grid service itself is a client to another grid service.

7. (Original) The method of claim 1 wherein multiple grid services are simultaneously deployed.

8. (Currently amended) A method for providing dynamic undeployment of grid services over a computer network, comprising:

automatically removing grid artifacts from a directory located on a target hosting environment, said grid artifacts including:

- a Web service deployment descriptor;
- a service implementation; and
- a WSDL describing said service implementation.

9. (Currently amended) A system for providing dynamic deployment of grid services over a computer network, comprising:

~~at least one web-enabled client system;~~

~~—— a host system in communication with said at least one network-enabled client system and a target hosting environment over the computer network, the target hosting environment remotely located from the network-enabled client system, said host system operating in an OGSi architected environment; and~~

~~a grid services deployment system executing on said host system;~~

~~—— at least one hosting environment system, said at least one hosting environment system providing grid services; and~~

~~—— a host directory located on said at least one hosting environment system;~~

~~—— wherein said the grid services deployment system performs performing:
installing grid artifacts in a directory located on ~~[[a]]~~ the target
hosting environment in response to an invocation of an implementation of a deployment grid
service by the network-enabled client system, said grid artifacts including:~~

~~a Web service deployment descriptor;~~

~~a service implementation; and~~

~~a WSDL describing said service implementation; and~~

~~providing addressability of said grid service to said network-enabled client system over the computer network by updating said Web service deployment descriptor with service data elements and typemappings associated with said network-enabled client system;~~

~~wherein said artifacts are resident in a GAR file
provided by a grid services deployment system.~~

10. (Currently amended) The system of claim 9, further comprising a user interface implemented by the host system, the user interface operable for interacting with said at least one ~~web-enabled~~ network-enabled client system.

11. (Currently amended) A computer program product embodied on a computer-readable medium, the computer program product including instructions executable by a computer processor ~~storage medium encoded with machine-readable computer program code for providing~~ dynamic deployment of grid services over a computer network, the computer program product including instructions executable by a computer processor for performing ~~storage medium including instructions for causing a computer to implement a method, comprising:~~

installing grid artifacts in a directory located on a target hosting environment in response to an invocation of an implementation of a deployment grid service by a client system, the target hosting environment remotely located from the client system over the computer network, said grid artifacts including:

- a Web service deployment descriptor;
- a service implementation; and
- a WSDL describing said service implementation; and

providing addressability of said grid service to said client system over the computer network by updating said Web service deployment descriptor with service data elements and typemappings associated with said client system;

wherein said artifacts are resident in a GAR file provided by a grid services deployment system.

12. (Currently amended) The computer program product ~~storage medium~~ of claim 11, wherein installing said service implementation includes:

- extracting Java class files from said GAR file;
- copying said Java class files into a first subdirectory on said target hosting environment directory;
- extracting Java Jar files from said GAR file; and

copying said Java jar files into a second subdirectory.

13. (Currently amended) The computer program product storage medium of claim 11, wherein installing said WSDL includes:

extracting WSDL files from said GAR file; and

copying said WSDL files into a third subdirectory on said target hosting environment.

14. (Currently amended) The computer program product storage medium of claim 11, wherein installing said Web service deployment descriptor includes:

extracting service Web Service Deployment Descriptors (WSDD) files;

copying said service WSDD files into a temporary directory of said target hosting environment directory;

extracting client Web Service Deployment Descriptors (WSDD) files; and

copying said client WSDD files to a temporary directory at said target hosting environment.

15. (Currently amended) The computer program product storage medium of claim 11, wherein said installing said grid artifacts in a directory further includes:

automatically copying said GAR file into a deployedGARs subdirectory in said target hosting environment directory, wherein said copying said GAR file into a deployedGARs subdirectory is operable for undeploying a grid service operation.

16. (Currently amended) The computer program product storage medium of claim 11, wherein said updating said Web service deployment descriptor with service data elements and typemappings associated with said client system comprises:

merging said service element and sub-elements into said active WSDD; and

merging any service XML-to-Java typemappings needed for XML-to-Java serialization and deserialization based upon said types defined in a grid service's WSDL definition; and

merging any client XML-to-Java typemappings into said active client WSDD in the event that said grid service itself is a client to another grid service.

17. (Currently amended) The computer program product storage medium of claim 11 wherein multiple grid services are simultaneously deployed.

18. (New) The method of claim 7, further comprising remotely and concurrently deploying the GAR file to multiple target hosting environments over the computer network.

19. (New) The method of claim 7, further comprising remotely and concurrently deploying multiple GAR files to corresponding multiple target hosting environments over the computer network.